

APPARATUS AND PROCESS TO CLEAN
AND STRIP COATINGS FROM HARDWARE

ABSTRACT

Apparatus for stripping ceramic coatings from the surfaces of articles. The apparatus includes a dedicated pressure vessel, such as an autoclave, which is maintained at an elevated temperature. Caustic solution is preheated to a first elevated temperature before injecting it into the autoclave, and the caustic solution is filtered and cooled after use in the autoclave. The articles are stripped of coating by maintaining the articles at an elevated temperature and pressure for a predetermined time. Various options include the use of analytical equipment to maintain the chemistry of the caustic solution and use of a volatile organic solution to prepressurize the autoclave and shorten cycle time. The autoclave is maintained in a nitrogen chamber to minimize the risks associated with volatile components. The articles are transferred to a separate pressure vessel after completion of the stripping operation so that the autoclave used for stripping can be maintained at an elevated temperature, thereby shortening the cycle time for stripping of additional articles.

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